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ABSTRACT

Few studies of person perception have examined the development of human nature concepts, i.e., the understanding of what it means to be human. In an attempt to explore the development of what being human means within the framework of cognitive development theory, 55 boys and 60 girls in kindergarten, fourth, eighth, and twelfth grade were given a semi-structured questionnaire consisting of three open-ended items about their understanding of themselves and others. Responses were identified as external or internal concepts and then coded in ten more specific content categories. The results indicated that with increasing age self, persons, and human nature were conceptualized in increasingly differentiated and abstract terms. There was a marked increase in psychological or inferential concepts between the kindergarten and fourth grade level. At the kindergarten level, the concept of human nature was found to be less differentiated than self and persons. In contrast, at the fourth grade level, human nature conceptions were proportionately more internal than external, while self and person concepts were still more external. The results of the study suggest that with age there is an expanded diversity in human conceptions which include increasingly more depth than surface characteristics, more dynamic and transient than static characteristics. (LLL)

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The Development and Differentiation of What it Means to be Human[1]

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Paper Presentation, Fifty-fifth Annual Meeting of the Eastern Psychological Association, Baltimore, Maryland
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[1]This study was implemented with the valuable assistance of the following students who chose to participate in all phases of the project in order to fulfill the research requirement in undergraduate courses in child psychology and human behavior offered at Glassboro State College during the 1983-84 school year: Kay Arden Noll, Gennine Zinner, Jeffrey Muller, Jeanne Giles, Maryann Hartman, Shari Colella, Carla DiDonato, Tom Lorge, and Robert Vitagliano.

Many years ago when I was growing up in Liberia, West Africa, I became increasing conscious of the fact that my adult caregivers expected me to be human. Although I was not exactly sure what this meant, I assumed the adults in my community knew, but always stopped short of making their ideas of humanness explicit to me. I remember my mother in praise saying about me to relatives "She's growing up into one fine human being"; or, in her occasional moments of criticism, admonishing me not to forget that I was a "human being". Such statements, like the many proverbs that influenced my development at the time, left so much unsaid that they alternately challenged, frustrated or, frightened me.

Years later, I came to the US for graduate study during which time I returned to a rural village in Liberia to do observations of parent-child interactions that might be linked with the development of achievement motivation. There, during one of my observation sessions, I heard a Kpelle father say to his 7 yr. old son: "Is that the way for a human being to act?" I was an adult now and thought I had discovered some ideas about being human, but at the time I could not help wondering what was that Kpelle child's conception of being human. I put the question on the back burner of my mind (so to speak) and only last year did I again become aware that it had emerged again as both a theoretical and an existential concern for me. This paper is an attempt to explore the development of what being human means within the framework of cognitive development theory.

Due to increased research activity over the past 15 years, we have expanded our understanding of social cognition or intelligence in children. This line of research goes beyond and complements the earlier focus of

cognitive development studies on children's understanding of physical reality.

However, most of the studies of social cognition have focused on moral development and role-taking. In contrast, only minimal attention has been devoted to children's development of concepts of persons, although there is a fairly substantial body of social psychological research on person perception in adults (Raven & Rubin, 1983; Wrightsman, 1977). The studies which have been done on the development of person perception have shown that children seven years of age and younger describe people in concrete, egocentric or stereotypic terms. By comparison, children eight years of age and older show a significant increase in the use of psychological, abstract or inferential terms (Livesley & Bromley, 1973; Peevers & Secord, 1973; Selman,1976; Honess, 1980; Barenboim, 1981; and Diaz & Berndt, 1982). In fact, these results reflecting a trend toward increased differentiation in person perception with age parallel findings from studies on the development of self-conceptions from childhood to adolescence (Guardo & Bohan, 1971; Peevers and Secord, 1974; Montemayor & Eisen, 1977; Keller, Ford & Meacham, 1978; Mohr, 1978; Ruble, Boggiano, Feldman & Loebl, 1980; and Damon, 1982). This research has shown that with age, self-concepts also become less concrete and more psychological.

Until very recently, none of the existing studies of person perception had examined the development of human nature concepts, i.e. the understanding of what it means to be human. Notwithstanding, there was some evidence that a humanity dimension may be interwoven at least in children's self-conceptions. In 1971 Guardo and Bohan examined humanity as one of four postulated aspects of self-identity and found qualitative differences between younger and older

children. Also, a sample of self-descriptions provided by Montemayor and Eisen (1977) reflects the humanity dimension by early adolescence. For example, a nine-year-old boy's self-description omitted any specific human references. It began "My name is B_____. I have brown eyes. I have brown hair..." On the other hand, an eleven and a half-year-old girl began her self-description "My name is A_____. I'm a human being. I am a girl. I'm a truthful person..." While a seventeen-year-old girl's protocol began: "I am a human being. I am a girl. I am an individual..." However, in the reported analysis of these crosssectional data, Montemayor and Eisen did not focus on this aspect of the self-descriptions.

The dearth of research on potential changes in human nature concepts with age is remarkable in view of social psychological research among adults on the dimensions and significance of human nature philosophies (Bruner & Tagiuri, 1954; Cronbach, 1955; Wrightsman, 1974). To remediate this lag, during the Fall of 1983 and earlier this Spring I conducted a crosssectional study designed to extend the existing research on social cognition to the development and differentiation of human nature concepts. The objectives were to determine if there are age differences in conceptions of human nature and to explore the relationship among human nature concepts, concepts of specific significant others, and self-concepts.

Kelly's personal construct theory (1955; 1963) and the cognitive-developmental theory of Werner (1948; 1957) and Piaget (1968; 1970) provide the theoretical basis of the study. According to Kelly, a construct is a way of interpreting the world, a concept which an individual uses to categorize people, objects, and events and to guide his or her behavior. All of us experience events and try to choose constructs that will make the world

understandable. Personal construct theory recognizes that individuals differ in the number and type of constructs they use in trying to understand others, i.e. in cognitive complexity or "the capacity to construe social behavior in a multi-dimensional way" (Bieri, Atkins, Briar, Leaman, Miller & Tripodi, 1966). However, the research on personal constructs has been done primarily with adults, leaving largely unanswered the question of developmental changes in construct systems, at least within this theoretical framework.

Both Piaget (Inhelder & Piaget, 1958) and Werner (1961) have addressed the question of structural changes in constructs with age, proposing that an individual's cognitions about the world undergo qualitative changes from childhood to adulthood. Both theorists have suggested that conceptual development proceeds from global, egocentric concepts toward increasing differentiation and hierarchic integration, from concrete toward socialized perspectives and abstract representations. Since these cognitive developmental views have been usefully applied in studies on the development of self and person conceptions, it appears reasonable to assume that they may be similarly useful in exploring the development of human nature concepts. The major hypothesis of the study was that with age, the self, persons and human nature would be conceptualized in increasingly differentiated and abstract terms.

Method

Subjects. The 55 boys and the 60 girls who were the participants of the study were students in classes at four grade levels in a public school system in Southern New Jersey: kindergarten, fourth, eighth and twelfth. These age/grade groups included black and white students from middle class and working class families.

Measure. A semi-structured questionnaire including the following open-ended items was developed and pretested: (1) Suppose you just met someone who is eager to get to know as much as possible about you. How would you describe yourself? What would you say about yourself? (2) Think about someone you admire or like a lot. Describe what he or she is really like. (3) What do you think it means to be human? What are the characteristics of "being human"? All forms contained the same order of questions. Since the study was exploratory, the only background information required were age, sex, and grade level.

Procedure. Two colleagues of the Psychology Department at Glassboro State College reviewed the proposal for the study and recommended it for college funding. The investigator obtained informed consent from the superintendent and principals of the schools selected and consulted with them regarding scheduling times for testing that would be least disruptive to the students' programs. Each of the kindergarten children was interviewed individually by one of two female college students in a special room in their school. The interviews lasted approximately 15 minutes and audio tapes of them were later transcribed for subsequent coding.

Two Glassboro State college students-- a male and a female -- administered copies of the questionnaire to each of the older groups during a class period. The following directions were read by one of the students:

> This is a study of people's understanding of themselves and others. At the top of each of the next three pages, you will find a question. Please read each question and express your own ideas by completing the blanks below the question. There are no right or wrong answers.
>
> Your name is not required, but please complete the following information below (age, sex, grade level). You will be told when to start and your answers will be timed (five minutes to complete each question), so that your classwork will not be interrupted unnecessarily.

Each response to each of the three questions was identified first as an external or internal concept and then coded in terms of 10 more specific content categories.

Concept Categories

External: Refers to external qualities of a person or his/her surroundings e.g. appearance, concrete physical characteristics or specific mannerisms, and physical condition; general physical information and identity; possessions; ascribed role, or group categories; and diffused, global or dichotomous affective terms.

Internal: Refers to more abstract, generalized, inner or psychological qualities, e.g. characteristic or regular ways of acting or interacting; achievements or skills; motivation or arousal; beliefs, thoughts, knowledge, or awareness; and transience of inner states or qualities.

Content Categories

1. Appearance in terms of overt physical characteristics, specific physical characteristics or mannerism, and physical condition, e.g. "tall"; "talks funny"; "healthy"; "sexy".

2. General physical information and identity e.g. name, age, sex, location.

3. Possessions e.g. "I have a computer."

4. Membership in role, reference, or interacting group (e.g. "I'm in 4th grade"; "He's French") and specific personal or interpersonal activity or involvement e.g. "She plays with me".

5. Diffuse, global, or dichotomous affective characteristics e.g. good; bad; nice.

6. Characteristic or regular ways of acting or interacting across situations and/or persons: e.g. forgiving, hard working, aggressive, good friend, generous, happy.

7. Achievements & skills, e.g. excellent football player, great in math, B student, famous.

8. Motivation or arousal e.g. motives, emotions, feelings, sensitivities, interests, attitudes, or values.

9. Beliefs, thoughts, knowledge, awareness e.g. intelligent, open-minded.

10. Number of content categories used.

The data were coded by the investigator assisted by the six college students who demonstrated a minimum intercoder agreement of 89.5%. Each participant's concept and content scores were computed as percentages of the total number of codable responses the participant produced in answering each question.

Results

The hypothesis of increasing differentiation in human conceptions was tested in terms of (a) the proportion of internal or inferential responses at each age/grade level and (b) in terms of conceptual complexity or the total number of identifiable internal and external categories used.

Proportion of Internal or Inferential Terms. Table 1 presents mean percentages of self conception, person conception and human conception responses coded as external or internal at each age/grade level. Using the SAS General Linear Models Procedure to correct for unequal cell sizes, separate 4(Age/Grade) x 2(Sex) analyses of variance were performed on each of these six dependent variables. Inspection of Table 1 indicates that there was no significant effect of sex, nor any age/sex interaction. In contrast, as expected, all six analyses yielded significant main effects of age. The characteristics of an age/grade group can be examined by looking at the row mean percentage of external and internal responses for that group. As can be seen, external self, person and human conceptions were significantly more pronounced at the kindergarten level ($F = 29.94$, 27.82, and 13.58, $df = 3$, $p < .001$). In contrast, approximately 59 per cent or more of the conceptions of the eighth and twelfth graders were internal ($F = 32.68$, 36.29 and 52.99, $df = 3$, $p < .001$). These results are reinforced by data in

Table 2 showing significant negative correlations of external conceptions with age ($r = -.61, -.60$ and $-.51$, $p < .001$) and significant positive correlations of internal conceptions with age ($r = .65, .64$, and $.71$, $p < .001$).

A closer examination of Table 1 shows the largest increases in internal self and person conceptions between kindergarten and fourth grade (from 5.8 to 41.0 and 8.9 to 48.8 per cents respectively); although at the fourth grade level self and person concepts are still more external than internal. This trend toward increasing internality in self and person conceptions is paralleled by even more dramatic increases in internal human conceptions (from 0.0 to 52.5 per cent).

Conceptual Complexity. The second test of the hypothesis of increasing complexity with age was conducted through an analysis of the number of content categories used at each age level to describe self, a significant admired person, and human nature. Similar analyses of variance were performed on these data which also confirmed the hypothesis of increasing differentiation with age. The bottom row of Tables 3, 4 and 5 show highly significant main effects of age ($F \geq 14.32$, $df = 3$, $p < .0001$). These results are supported by positive correlations between the number of human, self and person conception categories and age ($r = .597$, $p < .001$; $r = .50$, $p < .001$; and $r = .44$, $p < .001$ respectively).

Tables 3, 4, and 5 also show the pattern of contributions which the specific content categories made to the degree of differentiation in self, person and human conceptions. The strongest contributions to external self and person conceptions came from references to membership in role or interpersonal involvement followed by references to general physical characteristics.

In contrast, the strongest contribution to external human conceptions were from references to appearance and diffuse or global characteristics. On the other hand, internal self, person and human concepts were largely determined by references to characteristic actions or interactions.

Discussion

The major results of this study have strongly confirmed the hypothesis that with increasing age self, persons, and human nature are conceptualized in increasingly differentiated and abstract terms. To begin with, the data in all three areas showed significant increases in the relative proportion of internal concepts as well as the total number of concepts used across the four age/grade groups. Another consistent trend in self, person, and human conceptions is the marked increase in psychological or inferential concepts between the kindergarten level and the fourth grade level which is equivalent to an average age of nine years. In terms of both of these trends therefore, the results of this study are consistent with recent social-cognitive research on self and person conceptions, beginning with the work of Guardo and Bohan (1971) and Livesley and Bromley (1973).

The comparable age trends found in self, person, and human conceptions suggest that they are indeed aspects of the same construct system in that major incompatibilities and inconsistencies have been minimized (Kelly, 1955). Although these parallels are replications of previous developmental studies, it is also likely that these aspects of social cognition may have important distinguishing features.

Two distinctive differences are apparent in the data of this study: (1) At the kindergarten level, human nature is less differentiated than self and persons. In response to the question, "What does 'human' mean?"

followed by, "What does it mean to be human?", several kindergarten participants looked puzzled, said they did not know, or gave responses that were not categorizable within the coding system. These same children gave very definite responses in describing themselves or a "liked" person. (2) In contrast, at the fourth grade level, human nature conceptions are proportionately more internal than external; while self and person concepts are still more external.

These differences raise more questions than they answer. Do self, person, and human conceptions reflect different levels of conceptualizing the human experience (Kelly, 1955)? If so, do these social-cognitive trends suggest that self and person conceptions (developed probably in the context of social comparisons (Barenboim, 1981) are prerequisite to constructing broader inferences or constructs of shared humanity? Or could it be that children form a human nature schema (as they do a gender and a race schema) by the beginning of the preschool period and that this schema which is continually differentiated with experience, functions as a self-other perceptual or evaluative frame of reference?

Despite the fact that the research strategy employed in this study identified age trends in the proportion of external and internal concepts, Damon (1983) has cautioned us from hastily reducing these social-cognitive data to a stage theory, particularly a two-stage theory. Given the usual limitations of a crosssectional design as a basis for inferring behavioral changes with age, the data of this study do not justify any firm conclusions regarding age shifts in social-cognitive phenomena investigated. Instead, what they do suggest is that with age there is an expanded diversity in human conceptions which include increasingly more depth than surface

characteristics, more dynamic and transient than static characteristics.

A number of uncontrolled confounds limit the generalizability of these findings. Further research in this area should directly assess or control the contribution of various socio-cultural variables. Moreover, a major uncontrolled confound in this and other social-cognitive research stems from reliance on verbal responses. Therefore, the question can be raised regarding whether age trends thus discovered are artifacts of the assessment mode or true developmental differences.

Despite the exploratory nature of this study, it has both theoretical and practical implications. From a theoretical standpoint, although psychology has amassed a wealth of information about children's intelligence about the physical world, knowledge regarding how the human experience is conceptualized lags substantially. This study was an attempt to extend current research on social cognition to the development of human nature conceptions -- an aspect which might well provide an integrative link. From a practical standpoint, knowledge of the developmental course of human nature conceptions might have implications regarding innovative strategies for facilitating individual development toward full humanness (Maslow, 1971) in both normal and therapeutic settings.

TABLE 1

Self-Conceptions, Person-Conceptions and Human Conceptions:
Means and Analysis of Variance Results

Age/Grade Groups	Social-Cognitive Concept Categories					
	Self		Person		Human	
	External (X)	Internal (X)	External (X)	Internal (X)	External (X)	Internal (X)
Kindergarten	90.2	5.8	86.9	8.9	75.9	0.0
Fourth	59.2	41.0	51.4	48.8	47.6	52.3
Eighth	39.5	60.4	40.1	59.8	30.8	70.8
Twelfth	35.7	64.3	33.0	66.7	22.8	77.2
Sex: F Value	1.22	0.68	0.01	0.15	1.89	2.73
Age: F Value	29.94***	32.68***	27.82***	36.29***	13.58***	52.99***
Sex X Age: F Value	0.07	0.23	1.57	1.61	0.08	0.13

***$p < .001$

TABLE 2

Correlations Among the Social-Cognitive Measures*

Social-Cognitive Categories	Self Internal	Person External	Person Internal	Human External	Human Internal	Age
Self External	-.958	.596	-.638	.455	-.589	-.61
Self Internal		-.624	.665	-.499	.629	.65
Person External			-.953	.461	-.634	-.60
Person Internal				-.505	.674	.64
Human External					-.814	-.51
Human Internal						.71

* $p < .001$

TABLE 3

Specific Content of Self-Conceptions:

Means and Analysis of Variance Results

CONTENT CATEGORIES	AGE/GRADE GROUPS				ANOVA RESULTS		
	K	4th	8th	12th	Sex	Age	Sex x Age
External							
Appearance	7.3	16.0	10.5	8.4	1.31	2.12	1.80
General Physical	25.2	22.4	8.9	10.9	0.30	3.84*	0.01
Possessions	8.3	1.6	0.7	0.8	0.09	4.49**	0.21
Membership	46.1	16.4	10.5	15.8	2.44	15.81***	0.45
Diffuse	2.7	2.5	7.5	1.8	0.02	3.71*	0.28
Internal							
Action/Interaction	2.4	13.6	28.5	33.7	0.12	18.20***	1.53
Achievement/Skills	1.3	7.9	12.1	6.8	0.20	3.93*	0.29
Emotive	2.7	15.9	12.1	14.9	0.12	4.02*	0.49
Cognitive	0.0	4.3	7.8	7.1	1.77	4.84**	0.99
Number of Categories	2.0	4.5	4.2	4.7	0.05	25.94***	1.95

* $P < .01$

** $P < .005$

*** $P < .0001$

TABLE 4

Specific Content of Self-Conceptions:

Means and Analysis of Variance Results

CONTENT CATEGORIES	AGE/GRADE GROUPS				ANOVA RESULTS		
	K	4th	8th	12th	Sex	Age	Sex x Age
External							
Appearance	11.9	17.8	19.9	17.3	0.02	0.76	0.15
General Physical	13.1	7.5	3.1	2.1	4.31+	5.77**	1.68
Possessions	16.5	4.7	1.0	0.3	0.24	5.39**	0.23
Membership	42.9	15.9	7.8	6.4	0.35	20.17***	0.63
Diffuse	3.3	5.3	8.3	6.9	0.03	1.57	0.28
Internal							
Action/Interaction	5.3	30.6	40.0	42.7	3.22	19.08***	1.41
Achievement/Skills	0.0	7.4	6.5	6.4	2.90	2.09	0.24
Emotive	29.1	9.1	3.8	8.4	0.30	2.74+	0.17
Cognitive	0.0	2.1	9.6	9.1	3.55	9.38***	1.97
Number of Categories	2.2	4.1	3.7	4.6	0.20	14.32***	1.80

\+ $P < .05$

* $P < .01$

** $P < .005$

*** $P < .0001$

TABLE 5

Specific Content of Self-Conceptions:

Means and Analysis of Variance Results

CONTENT CATEGORIES	AGE/GRADE GROUPS				ANOVA RESULTS		
	K	4th	8th	12th	Sex	Age	Sex x Age
External							
Appearance	45.0	25.9	12.7	11.4	1.92	6.95**	1.34
General Physical	9.2	9.4	2.1	1.8	0.23	1.89	0.02
Possessions	0.8	2.9	0.2	0.7	5.46+	1.50	1.40
Membership	1.3	5.8	3.0	1.9	0.00	1.34	1.19
Diffuse	19.5	8.4	17.2	7.0	0.11	2.13	2.02
Internal							
Action/Interaction	0.0	23.9	45.7	36.6	0.01	15.66***	0.30
Achievement/Skills	0.0	8.6	4.7	6.4	0.78	1.54	0.63
Emotive	0.0	10.3	3.2	25.1	0.36	13.26***	0.17
Cognitive	0.0	4.7	11.3	9.1	6.48*	4.55**	1.20
Number of Categories	0.8	2.8	3.0	3.8	0.82	25.21***	1.84

+ $P < .05$

* $P < .01$

** $P < .005$

*** $P < .0001$

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